07

SOFT MOBILITY

Suitable equipment

7.1 | **Soft mobility devices/vehicles**

7.2 | **Safety equipment**

7.3 | **Traffic rules and safety measures**

7.4 | **Safe use of soft mobility devices/vehicles**

CAMPAIGN ROAD SAFETY AT WORK

VISION ZERO RISKS ACCIDENTS DEATHS

AAA.lu ASSOCIATION D'ASSURANCE ACCIDENT

UEL

SÉCURITÉ ROUTIÈRE LUXEMBOURG

CFC CENTRE DE FORMATION POUR CONDUCTEURS

LE GOUVERNEMENT DU GRAND-DUCHÉ DE LUXEMBOURG
Ministère de la Mobilité et des Travaux publics

The different types of soft mobility devices/vehicles

A proper distinction needs to be made between the various types of devices/vehicles that are used for soft mobility as they call for specific rules of conduct and determine specific lanes they are allowed to use. There is a wide range of soft mobility devices/vehicles which are classified as either **pedestrians** or **cycle vehicles**. Vehicles requiring a driving licence are not considered soft mobility vehicles.

Note that wheelchair users (motorised or not) are always considered pedestrians.

Personal transport devices are considered pedestrians.
These are devices without electric motors or children's toys with a maximum speed of less than 6 km/h.

Micro-electric vehicles are classified as cycles.
They have a maximum design speed of 25 km/h and are designed to carry one person.

Bicycle

Bicycle
powered solely by muscle power.

Pedal-assisted cycle or electric cycle
Auxiliary propulsion <1000 W or exclusively electric propulsion < 500 W maximum design speed < 25 km/h

If speed > 25 km/h: moped with AM licence.

Two-wheeled or three-wheeled moped with exclusively electric propulsion > 500 W or engine capacity < 50 cm³ maximum speed between 25 and 45 km/h

Safety equipment

CAMPAIGN
ROAD SAFETY
AT WORK

The means of transport used must be in good working condition and fitted with the necessary safety equipment.

Micro-electric vehicles, electric cycles and pedal-assisted cycles are considered bicycles.

Mandatory equipment for a bicycle in Luxembourg:

1. A bell.
2. Two brakes.
3. A white or yellow front light.
4. At least two reflectors per wheel.
5. Reflector on the pedals or reflective strips.
6. A red reflector.
7. A permanent red light at the rear.

On mountain bikes, the front light can be replaced by a white reflector, front and rear lights are optional provided that users only ride during the day and in decent weather conditions.

For further information on active mobility, please visit
www.transports.public.lu/en/se-deplacer/mobilite-active

Safety equipment

CAMPAIGN
ROAD SAFETY
AT WORK

Mandatory equipment for micro-electric vehicles:

Helmet strongly recommended, but **not mandatory**

Reflective clothing strongly recommended, but **not mandatory**

1. Audible warning device

2. Braking system

3. Permanent white front lights

4. Side reflectors

Maximum length: 1.50 m

Lights on micro-electric vehicles must be switched on at all times, night and day!

5. One permanent red light at a height of at least 40 cm

May be replaced by an equivalent device worn on the user's back/helmet.

Safety equipment

Although not mandatory, the use of a helmet is strongly recommended when travelling as it reduces the risk of head trauma and brain injury in the event of a fall or collision.

Helmets suitable for cycling, using scooters and roller skates must comply with standard EN 1078.

How to choose the right size helmet:

- Measure your head circumference 2.5 cm above your eyebrows with a measuring tape;
- The head circumference corresponds to the **size of the helmet** (usually between 47 and 62 cm);
- Should sizes be indicated as **XS to XL**, check the product description as it usually provides a size chart for conversion;
- Nowadays, most helmets are equipped with an **adjustment wheel** to fit the helmet size to your head circumference.

In any case, try the helmet on. Fasten the chin strap and shake your head vigorously.

If the helmet stays in place, it is the right size.

In accidents involving users of soft mobility devices/vehicles, the body parts most often affected are the arms, legs, face and head.

Protective gloves, elbow and knee pads are additional protections that can usefully complete your safety equipment.

How to wear a bike helmet?

Traffic rules and safety measures

If you travel by soft mobility, it is important to follow the Highway Code as it summarises the rules of the road for users considered **pedestrians** or **cyclists**. Users of soft mobility devices/ vehicles are road users in their own right, just like drivers and riders of two-wheeled vehicles. Look out for other road users and take care by adopting a respectful and preventive behaviour. This will increase safety in public spaces. Public spaces include roads, pavements and hard shoulders, as well as specific types of areas and lanes reserved for various categories of road users, such as cyclestreets, pedestrian zones and pathways for pedestrians and cyclists.

Residential zone

- Access is permitted for all vehicles as long as they respect the 20 km/h speed limit.
- Parking of motor vehicles is prohibited, except in specially designated areas or parking spaces.
- Children under the age of 13 are allowed to play in the street.
- Pedestrians may use the entire width of the street.
- Drivers must not endanger or obstruct pedestrians and must be able to stop their vehicle if necessary.

Difference

Zone de rencontre (coexistence zone)

The rules that apply to residential zones apply here too, except that children under the age of 13 are not allowed to play in the street.

Pedestrian zone

- Vehicle access is restricted by means of communal regulations and parking is prohibited.
- The speed limit is 20 km/h.
- Children under the age of 13 are allowed to play in the street.
- Pedestrians may use the entire width of the street.
- Cyclists, however, are not allowed on these streets unless otherwise indicated.

Cyclestreet

- The speed limit is 30 km/h.
- Cyclists may use the entire width of the traffic lane.
- In one-way streets, cyclists may use the entire width of the lane.
- Pedestrians must walk on the pavement.
- Drivers of motor vehicles must use the shortest possible distance without overtaking another vehicle or endangering or obstructing cyclists, and must be able to stop if necessary.
- Parking of motor vehicles is prohibited, except in specially designated areas or parking spaces.

Traffic rules and safety measures

Where should pedestrians walk?

- Pedestrians should walk on the pavement. If there is only one pavement on one side of the road, pedestrians must use it.

- On mandatory pathways for pedestrians/cyclists.

- On pathways recommended for pedestrians/cyclists.

- On the entire street in pedestrian zones, residential zones and coexistence zones.

If there is no pavement, pathway or zone for pedestrians, they must use the hard shoulder. If, however, the hard shoulder is not useable, pedestrians are allowed to walk on the road. Should this be the case, a pedestrian who travels alone must walk on the **left-hand side of the road**. A group of pedestrians or a pedestrian pushing a bicycle by hand, however, must always walk on the **right-hand side of the road**.

Traffic rules and safety measures

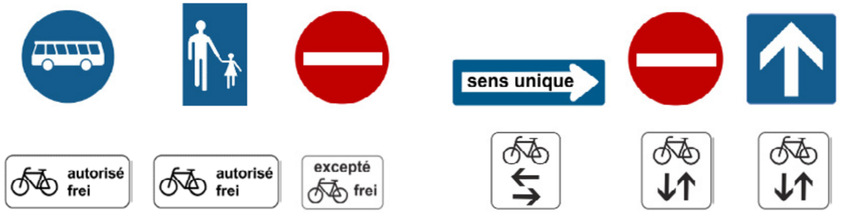
Where should cyclists and users of similar vehicles ride?

- Cyclists should generally ride on the right-hand side of the road.
- On cyclestreets, mandatory cycle lanes or tracks, pathways designated for pedestrians or pedestrians/cyclists.

- On pathways recommended for pedestrians/cyclists.

- Across the entire width of the street, in residential zones or coexistence zones (but not in pedestrian zones).

- Some additional signs may allow cyclists access or authorise them to ride in both directions.



When you are pushing your bicycle by hand, you are considered a pedestrian.

Traffic rules and safety measures

CAMPAIGN
ROAD SAFETY
AT WORK

Drivers, watch out for vulnerable road users!

Two-wheeled riders and pedestrians are vulnerable road users as, in the event of a collision, they are physically less protected than drivers of four-wheeled motor vehicles, whose interior is a protective space. The difference in weight (more than a tonne for a car compared to less than a hundred kilos for a cyclist) also works against the safety of two-wheelers and pedestrians in the event of a collision.

Adjusting speed is crucial because a pedestrian has a 95% chance of surviving in a collision with a vehicle driving at 30 km/h. This chance is down to 53% at a 50 km/h speed and to only 20% at a 60 km/h speed. Pedestrians are therefore the most vulnerable road users.

- Among them, the elderly and users with reduced mobility are most at risk as they tend to move and react more slowly and are often more hesitant. Slow down
- and stop if they are about to cross the road. Show some understanding and give them time to cross the road at their own pace.
- Children are unable to judge a vehicle's distance and speed correctly. They are naturally spontaneous and unpredictable. Anticipate the unexpected if children are near the road. Slow down, be ready to brake and stop if necessary.
- Be particularly cautious near schools, nurseries, playgrounds, etc.

Traffic rules and safety measures

CAMPAIGN
ROAD SAFETY
AT WORK

Drivers, watch out for vulnerable road users!

When approaching a pedestrian crossing or a pedestrian and cycle crossing, you should:

- Be ready to brake;
- Avoid overtaking;
- Avoid changing lanes.

These signs tell drivers that there is an upcoming stretch of road where pedestrians and cyclists cross the road or where pedestrians and cyclists come out onto the road. You therefore need to be particularly cautious at these locations.

This sign indicates that you are approaching a section of public road that is often used by children.

→ When you approach this signal, slow down, be extremely cautious and be ready to brake.

At pedestrian crossings or pedestrian and cycle crossings, you should:

- Give way to pedestrians or cyclists when they are crossing the road;
- Give way to pedestrians or cyclists when they indicate their intention to cross;
- If you allow a pedestrian or cyclist to cross, check that they are not endangered by other vehicles.

Parking is prohibited within 5 metres before or after a pedestrian crossing or a pedestrian and cycle crossing.

Drivers should also avoid driving too close to the kerb to make sure they don't injure pedestrians with the right-hand wing mirror.

Traffic rules and safety measures

CAMPAIGN
ROAD SAFETY
AT WORK

Drivers, watch out for vulnerable road users!

When overtaking a cyclist or moped rider, you should:

- Check their riding style
- Check traffic using your mirrors
- Switch on the left indicator in good time and **keep a side distance of at least 1.5 metres**.

If it is not possible to overtake, there is no point in tailgating. You should then keep a sufficient safety distance.

When turning right at an intersection, you must give way to the cyclists on your right who are continuing their ride straight ahead.
Also remember to watch out for pedestrians who may have right of way.

Traffic rules and safety measures

A blind spot is an area that the driver cannot see or sees with great difficulty while driving. Due to the size and height of vehicles, these blind spots, or hidden areas, are particularly important around buses and trucks.

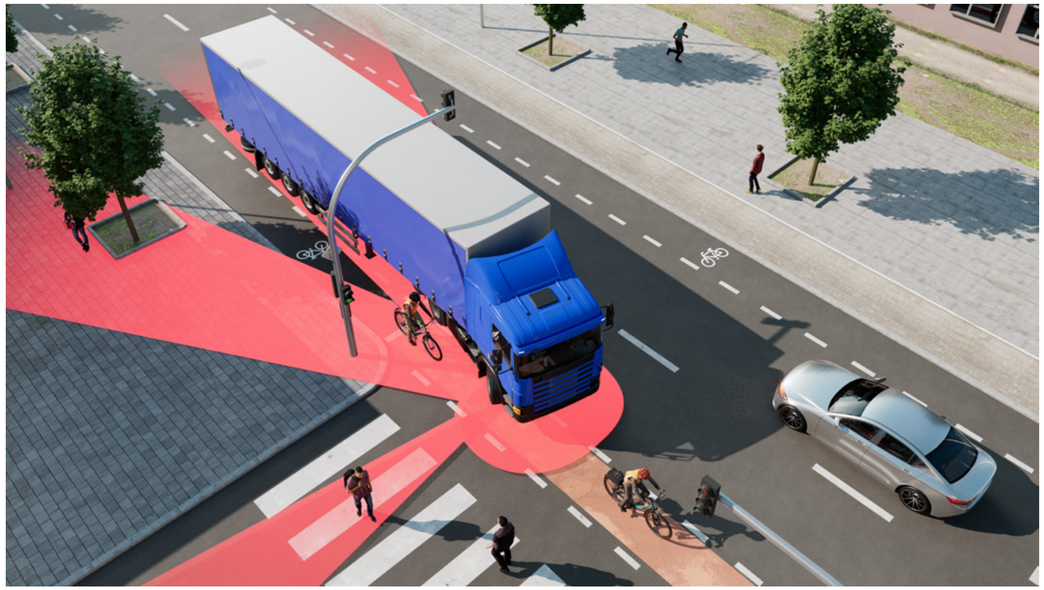
Blind spots account for nearly 3% of all road fatalities and **mainly affect cyclists and pedestrians**.

Some tips for cyclists or pedestrians when close to a heavy goods vehicle (HGV):

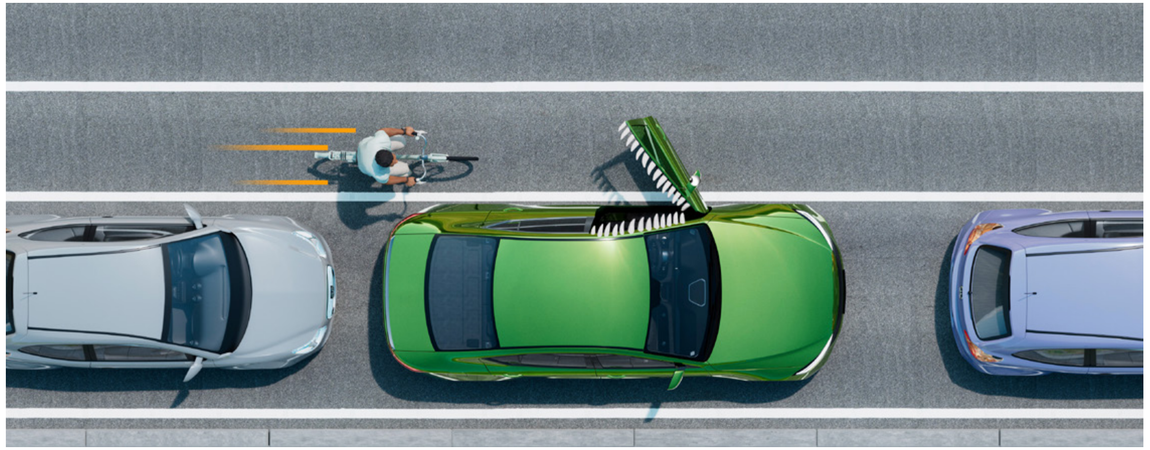
- Be aware of blind spots and try to avoid getting caught up in them.
- If possible, make eye contact with the driver.
- Never stop directly under the mirrors of the truck, but rather behind.
- Keep a sufficiently safe distance between the truck and yourself.
- Don't overtake when the truck is manoeuvring or when you approach a crossroads.

Some tips for HGV drivers:

- Before setting off, always check in the rear-view mirror as well as in the wide-angle mirror.
- Before turning or changing lanes, signal your intention for at least three indicator cycles.
- As you approach a crossroads, carefully check what might be in your way before manoeuvring.
- When stopped at an intersection, regularly monitor the surroundings of your vehicle.



Traffic rules and safety measures



When the vehicle is stopped, make sure you do not endanger a potential two-wheeler before you open the car door. Open the door of your vehicle with your right hand rather than with your left. This will allow you to check over your left shoulder if any cyclists may appear in your blind spot. You should also look into the rear-view mirror to check if there are any cyclists speeding at a certain distance from your vehicle.

The door should also be opened with the right hand by passengers sitting in the front passenger seat or in the rear of the vehicle.

Traffic rules and safety measures

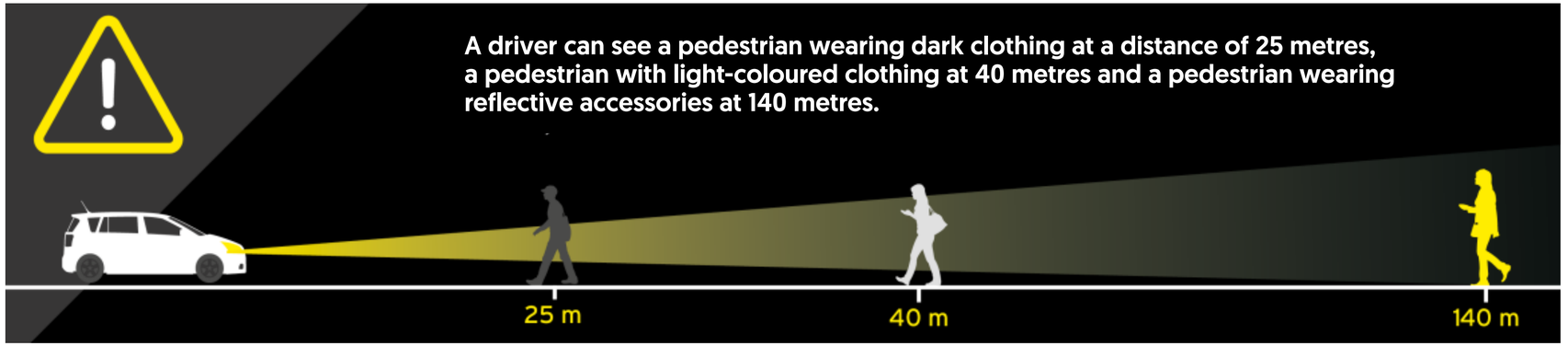
CAMPAIGN
ROAD SAFETY
AT WORK

Safety measures at night and in poor visibility conditions

Between nightfall and sunrise, as well as during daytime when visibility is poor due to bad weather conditions, you should wear a safety vest when you are walking on the road outside built-up areas.

The use of a safety vest or any other reflective accessory is also recommended within built-up areas.
Enhance your level of safety by making sure you are “visible” to drivers.

The visibility of pedestrians is a good topic for an awareness campaign, for example in the autumn, when clocks switch from summer to winter time. A simple email or memo with a few useful tips for employees is an effective way of raising awareness among staff..



For further information, see the awareness campaign **“Be visible”** on **www.securite-routiere.lu/campagnes**

Facilitate soft mobility and promote its safety

CAMPAIGN
ROAD SAFETY
AT WORK

To facilitate and promote safe use of soft mobility devices and vehicles, more particularly bicycles, companies should offer a parking space where bicycles can be locked up. The locking device must be strong, securely fixed to the ground and allow the frame and, if possible, the front wheel of the bicycle to be locked. Racks that only protect the wheels should therefore be replaced by taller ones that secure the bike frame.

Micro-electric vehicles, which are generally not easy to secure, should be allowed to be parked inside the workplace where possible. It goes without saying that a sheltered and lit parking space is a real bonus in terms of safety and comfort, especially when it rains.

Changing rooms with lockers for storing cycling gear (helmets, clothing, bags) and showers available for staff who cycle to work also contribute to occupational well-being.

The appointment of a mobility officer, whose task is to develop a company-wide mobility plan that includes soft mobility, is a sign that encourages soft mobility use. Depending on the mobility plan and the share of soft mobility in business travel, the company could organise training in cycling skills for those concerned

Should the company provide its employees with bicycles or micro-electric vehicles, it is its responsibility, as with company vehicles, to ensure that they are in good working order and equipped with all mandatory safety equipment.

To develop a corporate mobility plan, visit www.mconcept.lu